MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2016/2017

TCC3141 – CLOUD COMPUTING
(All Sections / Groups)

12 OCTOBER 2016
2.30 p.m. – 4.30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 3 printed pages including cover page with 5 questions only.

2. Attempt **ALL** questions. All questions carry equal marks and the distribution of marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

Question 1 [10Marks]

(a)   Cost reduction is one of the business drivers for cloud computing adoption. List **TWO (2)** types of organizational costs that accounted for, when making decision for cloud adoption.

[2 Marks]

(b)   Differentiate between horizontal and vertical scaling in cloud computing environment.

[8 Marks]

Question 2 [10 Marks]

(a)   Explain the differences between SaaS, PaaS, and IaaS cloud delivery models with regards to the activities and typical level of control granted to cloud consumer.

[6 Marks]

(b)   Identify any **FOUR (4)** REST (Representational State Transfer) design constraints.

[4 Marks]

Question 3 [10 Marks]

(a)   Describe the virtualization attack in cloud computing. Draw a diagram to illustrate this attack. Propose **TWO (2)** potential solutions to overcome this threat.

[4 Marks]

(b)   State **TWO (2)** reasons for resource replication in cloud computing environment.

[2 Marks]

(c)   Explain the hypervisor mechanism used in resource replication.

[4 Marks]

Continued ...

Question 4 [10 Marks]

(a)   By using a flow diagram, demonstrate the processes involved in SLA management system in cloud computing environment.

[6 marks]

(b)   Describe any **TWO (2)** examples of resource pools.

[4 Marks]

Question 5 [10 Marks]

(a)   What is the purpose of live storage migration program used in storage maintenance window architecture.

[2 Marks]

(b)   Describe the Non-Disruptive Service Relocation Architecture. Provide a justification for the needs of this architecture. Use a diagram as example in your description.

[8 Marks]

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